## 1.0 AMENDMENT

Please withdraw claims 43-57, without prejudice and without disclaimer, as being directed to a non-elected invention.

Please cancel claims 2, 6-13, without prejudice and without disclaimer, as being directed to non-elected species.

Please amend claims 1 and 3-5 as shown below:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A ribozyme that specifically cleaves an mRNA encoding a polypeptide that causes or contributes to the disease, disorder, or dysfunction of a cell or a tissue of a mammalian eye, wherein said ribozyme specifically cleaves an mRNA encoding an IGF-1 receptor polypeptide.
- 2. (Canceled)
- 3. (Currently Amended) The ribozyme of claim 21, wherein said ribozyme (a) comprises the sequence of any one of SEQ ID NO:2, or SEQ ID NO:90 to SEQ ID NO:105, or (b) specifically cleaves an mRNA comprising a sequence selected from any one of SEQ ID NO:1, or SEQ ID NO:3 to the sequence of SEQ ID NO:88 or SEQ ID NO:89.
- 4. (Currently Amended) The ribozyme of claim 3, wherein said ribozyme comprises a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:88, and SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEO ID NO:95, SEO ID NO:96, SEO ID NO:97, SEO ID NO:98, SEO ID

NO:99, the sequence of SEQ ID NO:100[[,]] or SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, and SEQ ID NO:105.

5. (Currently Amended) The ribozyme of claim 21, wherein said ribozyme specifically cleaves an mRNA encoding a polypeptide selected from the group consisting of a mutant rod opsin polypeptide, a mutant RP1 polypeptide, a mutant RDS/Peripherin polypeptide, a mutant iNOS polypeptide, a mutant A<sub>2B</sub> receptor polypeptide, a mutant IGF-1 receptor polypeptide, a mutant alpha 1 polypeptide, a mutant alpha 3 polypeptide, and a mutant alpha V polypeptide.

## 6.-13. (Canceled)

- 14. (Original) The ribozyme of claim 1, wherein said molecule is a hammerhead ribozyme.
- 15. (Original) The ribozyme of claim 1, wherein said molecule is a hairpin ribozyme.
- 16. (Original) A vector comprising a polynucleotide encoding the ribozyme of claim 1, said polynucleotide operably linked to at least a first promoter element that directs expression of said polynucleotide in a mammalian cell.
- 17. (Original) The vector of claim 16, wherein said vector is a viral vector.
- 18. (Original) The vector of claim 17, wherein said viral vector is an adeno-associated viral vector.

- 19. (Original) The vector of claim 16, wherein said promoter element directs expression of said polynucleotide in a retinal cell.
- 20. (Original) The vector of claim 16, wherein said promoter element directs expression of said polynucleotide in a photoreceptor cell.
- 21. (Original) The vector of claim 16, wherein said promoter element directs expression of said polynucleotide in a rod or a cone cell.
- 22. (Original) The vector of claim 16, wherein said promoter element directs expression of said polynucleotide in a Mueller cell, or a retinal pigement epithelium cell.
- 23. (Original) The vector of claim 16, wherein said promoter element comprises a mammalian rod opsin promoter element.
- 24. (Original) The vector of claim 16, wherein said promoter element comprises a constitutive or an inducible promoter element.
- 25. (Original) A virus comprising the ribozyme of claim 1, or a polynucleotide that encodes the ribozyme of claim 1.
- 26. (Original) The virus of claim 25, wherein said virus is an adenovirus or an adeno-

- 27. (Original) An adeno-associated viral vector comprising the ribozyme of claim 1, or a polynucleotide that encodes the ribozyme of claim 1.
- 28. (Original) The adeno-associated viral vector of claim 27, wherein said polynucleotide is operably linked to at least a first regulatory element that directs expression of said polynucleotide in a mammalian cell.
- 29. (Original) The adeno-associated viral vector of claim 28, wherein said regulatory element comprises a promoter that expresses said polynucleotide in a cell of a human eye.
- 30. (Original) A host cell that comprises:
  - (a) the ribozyme of claim 1;
  - (b) the vector of claim 16;
  - (c) the virus of claim 25; or
  - (d) the adeno-associated viral vector of claim 27.
- 31. (Original) The host cell of claim 30, wherein said cell is a mammalian host cell.
- 32. (Original) The host cell of claim 31, wherein said mammalian host cell is a human cell.
- 33. (Original) The host cell of claim 32, wherein said human cell is a retinal cell.

- 34. (Original) The host cell of claim 33, wherein said retinal cell is a photoreceptor cell.
- 35. (Original) The host cell of claim 34, wherein said retinal cell is a photoreceptor rod or cone cell.
- 36. (Original) A composition comprising:
  - (a) the ribozyme of claim 1;
  - (b) the vector of claim 16;
  - (c) the virus of claim 25; or
  - (d) the adeno-associated viral vector of claim 27.
- 37. (Original) The composition of claim 36, further comprising a pharmaceutical excipient.
- 38. (Original) The composition of claim 37, wherein said pharmaceutical excipient is suitable for ocular or subretinal administration to a mammalian eye.
- 39. (Original) The composition of claim 36, further comprising a lipid, a liposome, a nanoparticle, or a microsphere.
- 40. (Original) A kit comprising:
  - (a) (i) the ribozyme of claim 1;
    - (ii) the vector of claim 16;
    - (iii) the virus of claim 25; or
    - (iv) the adeno-associated viral vector of claim 27; and

- (b) instructions for using said kit.
- 41. (Original) A kit comprising the composition of claim 36, and instructions for using said kit.
- 42. (Original) The kit of claim 41, further comprising device for delivering said composition to the eye, retina, or subretinal space of a mammal.
- 43. (Withdrawn) A method for decreasing the amount of mRNA encoding a selected polypeptide in a retinal cell of a mammalian eye, comprising providing to said eye an amount of the composition of claim 36, and for a time effective to specifically cleave said mRNA in said cell, and thereby decrease the amount of mRNA in said cell.
- 44. (Withdrawn) The method of claim 43, wherein said ribozyme specifically cleaves an mRNA encoding a polypeptide that causes a pathological condition in, or contributes to a disease, disorder, or dysfunction in a cell or a tissue of a mammalian eye.
- 45. (Withdrawn) The method of claim 43, wherein said composition is provided to said eye by direct administration, ocular injection, retinal injection, or subretinal injection.
- 46. (Withdrawn) The method of claim 44, wherein said pathological condition is selected from the group consisting of retinal degeneration, retinitis, macular degeneration, or retinopathy.

- 47. (Withdrawn) The method of claim 46, wherein said retinitis is retinitis pigmentosa.
- 48. (Withdrawn) The method of claim 46, wherein said pathological condition is autosomal dominant retinitis pigmentosa or autosomal recessive retinitis pigmentosa.
- 49. (Withdrawn) The method of claim 46, wherein said pathological condition is macular degeneration.
- 50. (Withdrawn) The method of claim 49, wherein said pathological condition is agerelated macular degeneration.
- 51. (Withdrawn) The method of claim 46, wherein said pathological condition is retinopathy.
- 52. (Withdrawn) The method of claim 51, wherein said pathological condition is diabetic retinopathy.
- (Withdrawn) A method for decreasing the amount of a selected polypeptide in a cell or tissue of a mammalian eye, comprising providing to said eye an amount of the ribozyme of claim 1 and for a time effective to specifically decrease the amount of said selected polypeptide in said cell or said tissue.
- 54. (Withdrawn) A method for decreasing the amount of a selected polypeptide in the eye of a mammal suspected of having a pathological condition selected from the group

consisting of retinal degeneration, retinitis, macular degeneration, and retinopathy, comprising directly administering to said eye: (a) the ribozyme of claim 1, (b) the vector of claim 16, (c) the virus of claim 25, or (d) the adeno-associated viral vector of claim 27, in an amount and for a time effective to specifically cleave an mRNA encoding said selected polypeptide, and thereby decreasing the amount of said polypeptide in said eye.

- 55. (Withdrawn) A method for treating, decreasing the severity, or ameliorating the symptoms of a pathological condition that results from the expression of at least a first selected polypeptide in a cell or a tissue of a human eye, said method comprising directly administering to said eye: (a) the ribozyme of claim 1, (b) the vector of claim 16, (c) the virus of claim 25, or (d) the adeno-associated viral vector of claim 27, in an amount and for a time effective to treat, decrease the severity, or ameliorate the symptoms of said pathological condition.
- 56. (Withdrawn) The method of claim 55, wherein said symptoms are selected from the group consisting of atrophic lesions of the eye, pigmented lesions of the eye, blindness, a reduction in central vision, a reduction in peripheral vision, and a reduction in total vision.
- 57. (Withdrawn) A method for decreasing the progression of a degenerative pathological condition of a mammalian eye, comprising providing to said eye: (a) the ribozyme of claim 1, (b) the vector of claim 16, (c) the virus of claim 25, or (d) the adeno-associated

viral vector of claim 27, in an amount and for a time effective to decrease the progression of said degenerative pathological condition.